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Autore	Mazrui Al-Amin Bin Ali
Titolo	Guidance (Uwongozi) by Sheikh al-Amin Mazrui : selections from the first Swahili Islamic newspaper / / translated by Kai Kresse, Hassan Mwakimako ; introduced and edited by Kai Kresse
Pubbl/distr/stampa	Leiden, [Netherlands] ; ; Boston, [Massachusetts] : , : Brill, , 2017 ©2017
ISBN	90-04-33554-4
Edizione	[A Swahili-English edition.]
Descrizione fisica	1 online resource (202 pages)
Collana	African Sources for African History, , 1567-6951 ; ; Volume 13
Disciplina	297.0967620904
Soggetti	Muslims - Religious life - Kenya Islam - Kenya - History - 20th century Religious life - Islam Kenya Religious life and customs
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Guidance (Uwongozi) by Sheikh al-Amin Mazrui: Selections from the First Swahili Islamic Newspaper. A Swahili-English Edition / Kai Kresse.
Sommario/riassunto	Sheikh al-Amin Mazrui wrote his essays of this Guidance ( Uwongozi ) collection in Mombasa between 1930 and 1932, providing social critique and moral guidance to Kenya's coastal Muslims during a period of their decline during British colonial rule. The essays were initially published as a series of double-sided pamphlets called Sahifa (The Page), the first Swahili Islamic newspaper. Inspired by contemporary debates of Pan-Islam and Islamic modernism, and with a critical eye on British colonialism, this leading East African modernist takes issue with his peers, in a sharply critical and yet often humorous tone. Al-Amin Mazrui was the first to publish Islamic educational prose and social commentary in Swahili. This bi-lingual edition makes fascinating reading for specialists and general readers.

2. Record Nr.	UNINA9910254067503321
Autore	Bally Vlad
Titolo	Stochastic Integration by Parts and Functional Itô Calculus // by Vlad Bally, Lucia Caramellino, Rama Cont ; edited by Frederic Utzet, Josep Vives
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Birkhäuser, , 2016
ISBN	3-319-27128-8
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (IX, 207 p. 1 illus. in color.)
Collana	Advanced Courses in Mathematics - CRM Barcelona, , 2297-0304
Disciplina	510
Soggetti	Probabilities Differential equations Differential equations, Partial Probability Theory and Stochastic Processes Ordinary Differential Equations Partial Differential Equations
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Intro -- Foreword -- Contents -- Part I Integration by Parts Formulas, Malliavin Calculus, and Regularity of Probability Laws -- Preface -- Problem 1 -- Problem 2 -- Problem 3 -- Problem 4 -- Conclusion -- Chapter 1 Integration by parts formulas and the Riesz transform -- 1.1 Sobolev spaces associated to probability measures -- 1.2 The Riesz transform -- 1.3 A first absolute continuity criterion: Malliavin-Thalmaier representation formula -- 1.4 Estimate of the Riesz transform -- 1.5 Regularity of the density -- 1.6 Estimate of the tails of the density -- 1.7 Local integration by parts formulas and local densities -- 1.8 Random variables -- Chapter 2 Construction of integration by parts formulas -- 2.1 Construction of integration by parts formulas -- 2.1.1 Derivative operators -- 2.1.2 Duality and integration by parts formulas -- 2.1.3 Estimation of the weights -- Iterated derivative operators, Sobolev norms -- Estimate of $ (F) $ -- Bounds for the weights $H_q(F,G)$ -- 2.1.4 Norms and weights -- 2.2 Short introduction to Malliavin calculus -- 2.2.1 Differential operators

-- Step 1: Finite-dimensional differential calculus in dimension  $n$  --  
 Step 2: Finite-dimensional differential calculus in arbitrary dimension --  
 Step 3: Infinite-dimensional calculus -- 2.2.2 Computation rules and integration by parts formulas -- 2.3 Representation and estimates for the density -- 2.4 Comparisons between density functions -- 2.4.1 Localized representation formulas for the density -- 2.4.2 The distance between density functions -- 2.5 Convergence in total variation for a sequence of Wiener functionals -- Chapter 3 Regularity of probability laws by using an interpolation method -- 3.1 Notations -- 3.2 Criterion for the regularity of a probability law -- 3.3 Random variables and integration by parts -- 3.4 Examples -- 3.4.1 Path dependent SDE's. 3.4.2 Diffusion processes -- 3.4.3 Stochastic heat equation -- 3.5 Appendix A: Hermite expansions and density estimates -- 3.6 Appendix B: Interpolation spaces -- 3.7 Appendix C: Superkernels -- Bibliography -- Part II Functional Itô Calculus and Functional Kolmogorov Equations -- Preface -- Chapter 4 Overview -- 4.1 Functional Itô Calculus -- 4.2 Martingale representation formulas -- 4.3 Functional Kolmogorov equations and path dependent PDEs -- 4.4 Outline -- Notations -- Chapter 5 Pathwise calculus for non-anticipative functionals -- 5.1 Non-anticipative functionals -- 5.2 Horizontal and vertical derivatives -- 5.2.1 Horizontal derivative -- 5.2.2 Vertical derivative -- 5.2.3 Regular functionals -- 5.3 Pathwise integration and functional change of variable formula -- 5.3.1 Quadratic variation of a path along a sequence of partitions -- 5.3.2 Functional change of variable formula -- 5.3.3 Pathwise integration for paths of finite quadratic variation -- 5.4 Functionals defined on continuous paths -- 5.5 Application to functionals of stochastic processes -- Chapter 6 The functional Itô formula -- 6.1 Semimartingales and quadratic variation -- 6.2 The functional Itô formula -- 6.3 Functionals with dependence on quadratic variation -- Chapter 7 Weak functional calculus for square-integrable processes -- 7.1 Vertical derivative of an adapted process -- 7.2 Martingale representation formula -- 7.3 Weak derivative for square integrable functionals -- 7.4 Relation with the Malliavin derivative -- 7.5 Extension to semimartingales -- 7.6 Changing the reference martingale -- 7.7 Forward-Backward SDEs -- Chapter 8 Functional Kolmogorov equations -- 8.1 Functional Kolmogorov equations and harmonic functionals -- 8.1.1 Stochastic differential equations with path dependent coefficients -- 8.1.2 Local martingales and harmonic functionals. 8.1.3 Sub-solutions and super-solutions -- 8.1.4 Comparison principle and uniqueness -- 8.1.5 Feynman-Kac formula for path dependent functionals -- 8.2 FBSDEs and semilinear functional PDEs -- 8.3 Non-Markovian stochastic control and path dependent HJB equations -- 8.4 Weak solutions -- Comments and references -- Bibliography.

## Sommario/riassunto

This volume contains lecture notes from the courses given by Vlad Bally and Rama Cont at the Barcelona Summer School on Stochastic Analysis (July 2012). The notes of the course by Vlad Bally, co-authored with Lucia Caramellino, develop integration by parts formulas in an abstract setting, extending Malliavin's work on abstract Wiener spaces. The results are applied to prove absolute continuity and regularity results of the density for a broad class of random processes. Rama Cont's notes provide an introduction to the Functional Itô Calculus, a non-anticipative functional calculus that extends the classical Itô calculus to path-dependent functionals of stochastic processes. This calculus leads to a new class of path-dependent partial differential equations, termed Functional Kolmogorov Equations, which arise in the study of martingales and forward-backward stochastic differential equations.

This book will appeal to both young and senior researchers in probability and stochastic processes, as well as to practitioners in mathematical finance.

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